

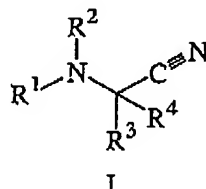
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This listing of claims will replace all prior versions and listings of claims in the application.

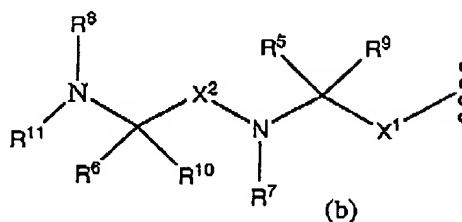
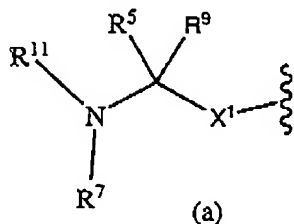
Listing of Claims

1. (Currently Amended) A compound of Formula (I):



in which:

R^1 is a group of Formula (a) or (b):



wherein:

X^1 and X^2 independently are $-C(O)-$ or $-CH_2S(O)_2-$;

R^5 and R^6 are hydrogen or (C_{1-6}) alkyl;

R^7 and R^8 are hydrogen or (C_{1-6}) alkyl or as defined below;

R^9 and R^{10} independently are (i) (C_{1-6}) alkyl optionally substituted with cyano, halo or nitro; or

(ii) a group selected from $-X^3NR^{12}R^{12}$, $-X^3NR^{12}C(O)OR^{12}$, $-X^3NR^{12}C(O)NR^{12}R^{12}$, $-X^3NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^3OR^{12}$, $-X^3SR^{12}$, $-X^3C(O)OR^{12}$, $-X^3C(O)NR^{12}R^{12}$, $-X^3S(O)_2NR^{12}R^{12}$, $-X^3P(O)(OR^{12})OR^{12}$, $-X^3OP(O)(OR^{12})OR^{12}$, $-X^3NR^{12}C(O)R^{13}$, $-X^3S(O)R^{13}$, $-X^3S(O)_2R^{13}$, $-X^3C(O)R^{13}$, $-X^3C(O)R^{14}$, $-X^3C(O)OR^{14}$, $-X^3OC(O)R^{14}$, $-X^3NR^{15}C(O)R^{14}$, $-X^3NR^{15}C(O)OR^{14}$, $-X^3C(O)NR^{14}R^{15}$, $-X^3S(O)_2NR^{14}R^{15}$, $-X^3NR^{15}C(O)NR^{14}R^{15}$, $-X^3NR^{15}C(NR^{15})NR^{14}R^{15}$, $-X^4SR^{14}$, $-X^4S(O)R^{14}$, $-X^4S(O)_2R^{14}$, $-X^4OR^{14}$, or $-X^4NR^{14}R^{15}$, wherein X^3 is (C_{1-6}) alkylene, X^4 is a bond or (C_{1-6}) alkylene, R^{12} at

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each occurrence independently is hydrogen, (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, R¹³ is (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, R¹⁴ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, or (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl, or hetero(C₃₋₁₂)polycycloaryl(C₀₋₆)alkyl and R¹⁵ is hydrogen or (C₁₋₆)alkyl, and wherein within R¹⁴ said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, or polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶, -X⁴C(O)OR¹⁶, -X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶, -X⁴C(O)NR¹⁶R¹⁷, -X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴ is a bond or (C₁₋₆)alkylene, R¹⁶ is hydrogen or (C₁₋₆)alkyl and R¹⁷ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, or (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or hetero(C₃₋₁₂)polycycloaryl(C₀₋₆)alkyl; or

(iii) a group selected from (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, and (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl, and hetero(C₃₋₁₂)polycycloaryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, or polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶, -X⁴C(O)OR¹⁶, -X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶, -X⁴C(O)NR¹⁶R¹⁷, -X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴, R¹⁶ and R¹⁷ are as defined above; wherein within R⁹ and/or R¹⁰ any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X⁴NR¹²R¹², -X⁴NR¹²C(O)OR¹², -X⁴NR¹²C(O)NR¹²R¹², -X⁴NR¹²C(NR¹²)NR¹²R¹², -X⁴OR¹², -X⁴SR¹², -X⁴C(O)OR¹², -X⁴C(O)NR¹²R¹², -X⁴S(O)₂NR¹²R¹², -X⁴P(O)(OR⁴)OR¹², -X⁴OP(O)(OR¹²)OR¹², -X⁴OC(O)R¹³, -X⁴NR¹²C(O)R¹³, -X⁴S(O)R¹³, -X⁴S(O)₂R¹³ and -X⁴C(O)R¹³, wherein X⁴, R¹² and R¹³ are as defined above; or

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~~R⁹ taken together with R⁷ and/or R¹⁰ taken together with R⁸ form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, oxo or methylene; and~~

R¹¹ is -X⁵X⁶R¹⁸, wherein X⁵ is -C(O)-, -C(O)C(O)- or -S(O)₂-, X⁶ is a bond, -O- or -NR¹⁹-, wherein R¹⁹ is hydrogen or (C₁₋₆)alkyl, and R¹⁸ is morpholinyl (i) (C₁₋₆)alkyl optionally substituted by cyano, halo, nitro, -NR¹²R¹², -NR¹²C(O)OR¹², -NR¹²C(O)NR¹²R¹², -NR¹²C(NR¹²)NR¹²R¹², -OR¹², -SR¹², -C(O)OR¹², -C(O)NR¹²R¹², -S(O)₂NR¹²R¹², -P(O)(OR¹²)OR¹², -OP(O)(OR¹²)OR¹², -NR¹²C(O)R¹², -S(O)R¹², -S(O)₂R¹², -C(O)R¹², -OR²⁰, -SR²⁰, -S(O)R²⁰, -S(O)₂R²⁰, -C(O)R²⁰, -C(O)OR²⁰, -C(O)NR²⁰R²¹, -NR²⁰R²¹, -NR²¹C(O)R²⁰, -NR²¹C(O)OR²⁰, -NR²¹C(O)NR²⁰R²¹ or -NR²¹C(NR²¹)NR²⁰R²¹, wherein R¹² and R¹³ are as defined above, R²⁰ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₃₋₁₂)bicycloaryl(C₀₋₆)alkyl or hetero(C₃₋₁₂)bicycloaryl(C₀₋₆)alkyl and R²¹ at each occurrence independently is hydrogen or (C₁₋₆)alkyl, or (ii) (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₃₋₁₂)bicycloaryl(C₀₋₆)alkyl or hetero(C₃₋₁₂)bicycloaryl(C₀₋₆)alkyl or (iii) (C₃₋₆)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl(C₀₋₆)alkyl, phenyl(C₀₋₆)alkyl or hetero(C₅₋₆)aryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is substituted by -X⁴OR²², -X⁴SR²², -X⁴S(O)R²², -X⁴S(O)₂R²², -X⁴C(O)R²², -X⁴C(O)OR²², -X⁴C(O)NR²²R²², -X⁴NR²²R²², -X⁴NR²²C(O)R²², -X⁴NR²²C(O)OR²², -X⁴NR²²C(O)NR²²R²² or -X⁴NR²²C(NR²²)NR²²R²², wherein X⁴ is as defined above, R²² is (C₃₋₆)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl(C₀₋₆)alkyl, phenyl(C₀₋₆)alkyl or hetero(C₅₋₆)aryl(C₀₋₆)alkyl and R²³ at each occurrence independently is hydrogen or (C₁₋₆)alkyl, wherein within R¹¹ said morpholino any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₆)alkyl, nitro, -X⁴NR¹²R¹², -X⁴NR¹²C(O)OR¹², -X⁴NR¹²C(O)NR¹²R¹², -X⁴NR¹²C(NR¹²)NR¹²R¹², -X⁴OR¹², -X⁴SR¹², -X⁴C(O)OR¹², -X⁴C(O)NR¹²R¹², -X⁴S(O)₂NR¹²R¹²,

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$-X^4P(O)(OR^3)OR^{12}$, $-X^4OP(O)(OR^3)OR^{12}$, $-X^4OC(O)R^{13}$, $-X^4NR^{12}C(O)R^{13}$, $-X^4S(O)R^{13}$, $-X^4S(O)_2R^{13}$ and $-X^4C(O)R^{13}$, wherein X^4 , R^{12} and R^{13} are as defined above;

R^2 is hydrogen or (C_{1-6}) alkyl or as defined below;

R^3 is hydrogen, or (C_{1-6}) alkyl or as defined below; and

R^4 is (i) hydrogen or (C_{1-6}) alkyl, wherein said alkyl is optionally substituted with cyano, halo, nitro, $-NR^{12}R^{12}$, $-NR^{12}C(O)OR^{12}$, $-NR^{12}C(O)NR^{12}R^{12}$, $-NR^{12}C(NR^{12})NR^{12}R^{12}$, $-OR^{12}$, $-SR^{12}$, $-C(O)OR^{12}$, $-C(O)NR^{12}R^{12}$, $-S(O)_2NR^{12}R^{12}$, $-P(O)(OR^{12})OR^{12}$, $-OP(O)(OR^{12})OR^{12}$, $-NR^{12}C(O)R^{13}$, $-S(O)R^{13}$, $-S(O)_2R^{13}$, $-C(O)R^{13}$, $-OR^{14}$, $-SR^{14}$, $-S(O)R^{14}$, $-S(O)_2R^{14}$, $-C(O)R^{14}$, $-C(O)OR^{14}$, $-OC(O)R^{14}$, $-NR^{14}R^{15}$, $-NR^{15}C(O)R^{14}$, $-NR^{15}C(O)OR^{14}$, $-C(O)NR^{14}R^{15}$, $-S(O)_2NR^{14}R^{15}$, $-NR^{15}C(O)NR^{14}R^{15}$ or $-NR^{15}C(NR^{15})NR^{14}R^{15}$, wherein R^{12} , R^{13} , R^{14} and R^{15} are as defined above, or (ii) a group selected from (C_{3-12}) cycloalkyl, (C_{0-6}) alkyl, hetero (C_{3-12}) cycloalkyl, (C_{0-6}) alkyl, (C_{6-12}) aryl, (C_{0-6}) alkyl, hetero (C_{6-12}) aryl, (C_{0-6}) alkyl, (C_{9-12}) polycycloaryl, (C_{0-6}) alkyl and hetero (C_{9-12}) polycycloaryl, (C_{0-6}) alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from $-R^{16}$, $-X^4OR^{16}$, $-X^4SR^{16}$, $-X^4S(O)R^{16}$, $-X^4S(O)_2R^{16}$, $-X^4C(O)R^{16}$, $-X^4C(O)OR^{16}$, $-X^4OC(O)R^{16}$, $-X^4NR^{16}R^{17}$, $-X^4NR^{17}C(O)R^{16}$, $-X^4NR^{17}C(O)OR^{16}$, $-X^4C(O)NR^{16}R^{17}$, $-X^4S(O)NR^{16}R^{17}$, $-X^4NR^{17}C(O)NR^{16}R^{17}$ or $-X^4NR^{17}C(NR^{17})NR^{16}R^{17}$, wherein X^4 , R^{16} and R^{17} are as defined above; wherein within R^9 and/or R^{10} any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C_{1-6}) alkyl, (C_{1-6}) alkylidene, cyano, halo, halo-substituted (C_{1-4}) alkyl, nitro, $-X^4NR^{12}R^{13}$, $-X^4NR^{12}C(O)OR^{13}$, $-X^4NR^{12}C(O)NR^{12}R^{12}$, $-X^4NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^4OR^{13}$, $-X^4SR^{13}$, $-X^4C(O)OR^{13}$, $-X^4C(O)NR^{12}R^{13}$, $-X^4S(O)_2NR^{12}R^{13}$, $-X^4P(O)(OR^3)OR^{12}$, $-X^4OP(O)(OR^3)OR^{12}$, $-X^4OC(O)R^{13}$, $-X^4NR^{12}C(O)R^{13}$, $-X^4S(O)R^{13}$, $-X^4S(O)_2R^{13}$ and $-X^4C(O)R^{13}$, wherein X^4 , R^{12} and R^{13} are as defined above; or

R^4 and R^3 taken together form trimethylene, tetramethylene or phenylene 1,2-dimethylene, optionally substituted with hydroxy, exo or methylene, or

~~R⁴ and R³ together with the carbon atom to which both R⁴ and R³ are attached form (C₃₋₈)cycloalkylene or (C₃₋₈)heterocycloalkylene;~~
and the an *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and or mixtures of isomers; ~~and the~~ or a pharmaceutically acceptable salts thereof.

2. (Currently Amended) The compound of Claim 1 in which:

R¹ is a group of Formula (a) wherein ~~within Formula (a):~~

X¹ is -C(O)-;

R⁵ is hydrogen or (C₁₋₆)alkyl;

R⁷ is hydrogen or methyl;

R⁹ is (i) (C₁₋₆)alkyl optionally substituted with -OR¹⁴, -SR¹⁴, -S(O)R¹⁴, -S(O)₂R¹⁴, -C(O)R¹⁴, -C(O)OR¹⁴, -OC(O)R¹⁴, -NR¹⁴R¹⁵, -NR¹⁵C(O)R¹⁴, -NR¹⁵C(O)OR¹⁴, -C(O)NR¹⁴R¹⁵, -S(O)₂NR¹⁴R¹⁵, -NR¹⁵C(O)NR¹⁴R¹⁵ or -NR¹⁵C(NR¹⁵)NR¹⁴R¹⁵, wherein R¹⁴ is (C₃₋₁₀)cycloalkyl, (C₀₋₆)alkyl, hetero(C₃₋₁₀)cycloalkyl, (C₀₋₆)alkyl, (C₆₋₁₀)aryl, (C₀₋₆)alkyl, hetero(C₃₋₁₀)aryl, (C₀₋₆)alkyl, or (C₉₋₁₀)polycycloaryl, (C₀₋₆)alkyl, or hetero(C₃₋₁₀)polycycloaryl, (C₀₋₆)alkyl and R¹⁵ is hydrogen or (C₁₋₆)alkyl, and wherein within R¹⁴ said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, or polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X³X⁴OR¹⁶, -X³X⁴SR¹⁶, -X³X⁴S(O)R¹⁶, -X³X⁴S(O)₂R¹⁶, -X³X⁴C(O)R¹⁶, -X³X⁴C(O)OR¹⁶, -X³X⁴OC(O)R¹⁶, -X³X⁴NR¹⁶R¹⁷, -X³X⁴NR¹⁷C(O)R¹⁶, -X³X⁴NR¹⁷C(O)OR¹⁶, -X³X⁴C(O)NR¹⁶R¹⁷, -X³X⁴S(O)₂NR¹⁶R¹⁷, -X³X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X³X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X³ X⁴ is a bond or (C₁₋₆)alkylene, R¹⁶ is hydrogen or (C₁₋₆)alkyl, and R¹⁷ is (C₃₋₁₀)cycloalkyl, (C₀₋₆)alkyl, hetero(C₃₋₁₀)cycloalkyl, (C₀₋₆)alkyl, hetero(C₃₋₁₀)aryl, (C₀₋₆)alkyl, or (C₉₋₁₀)polycycloaryl, (C₀₋₆)alkyl or hetero(C₃₋₁₀)polycycloaryl, (C₀₋₆)alkyl, or (ii) a group selected from (C₃₋₁₀)cycloalkyl, (C₀₋₆)alkyl, hetero(C₃₋₁₀)cycloalkyl, (C₀₋₆)alkyl, (C₆₋₁₀)aryl, (C₀₋₆)alkyl, hetero(C₃₋₁₀)aryl, (C₀₋₆)alkyl, (C₉₋₁₀)polycycloaryl, (C₀₋₆)alkyl and hetero(C₃₋₁₀)polycycloaryl, (C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X³OR¹⁶, -X³SR¹⁶, -X³S(O)R¹⁶, -X³S(O)₂R¹⁶, -X³C(O)R¹⁶, -X³C(O)OR¹⁶, -X³OC(O)R¹⁶, -X³NR¹⁶R¹⁷, -X³NR¹⁷C(O)R¹⁶, -X³NR¹⁷C(O)OR¹⁶, -X³C(O)NR¹⁶R¹⁷, -X³S(O)₂NR¹⁶R¹⁷, -X³NR¹⁷C(O)NR¹⁶R¹⁷ or -X³NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X³, R¹⁶ and R¹⁷ are as defined above, wherein within R⁹ any alicyclic or aromatic ring system present may be substituted further by

1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, $-X^3X^4NR^{12}R^{12}$, $-X^3X^4NR^{12}C(O)OR^{12}$, $-X^3X^4NR^{12}C(O)NR^{12}R^{12}$, $-X^3X^4NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^3X^4OR^{12}$, $-X^3X^4SR^{12}$, $-X^3X^4C(O)OR^{12}$, $-X^3X^4C(O)NR^{12}R^{12}$, $-X^3X^4S(O)_2NR^{12}R^{12}$, $-X^3X^4P(O)(OR^3)OR^{12}$, $-X^3X^4OP(O)(OR^3)OR^{12}$, $-X^3X^4OC(O)R^{13}$, $-X^3X^4NR^{12}C(O)R^{13}$, $-X^3X^4S(O)R^{13}$, $-X^3X^4S(O)_2R^{13}$ and $-X^3X^4C(O)R^{13}$, wherein X^3 , X^4 , R^{12} , and R^{13} are as defined above, R^{12} at each occurrence independently is hydrogen, (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, and R^{13} is (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl; and R^{11} is $-X^4X^5R^{18}$, wherein X^4 is C(O) or S(O)₂, X^5 is a bond, O or NR¹⁹, wherein R^{19} is hydrogen or (C₁₋₆)alkyl, and R^{18} is (i) (C₁₋₁₀)alkyl or (ii) (C₃₋₁₂)cycloalkyl, (C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl, (C₀₋₆)alkyl, (C₆₋₁₂)aryl, (C₀₋₆)alkyl or hetero(C₅₋₁₂)aryl, (C₀₋₆)alkyl or (iii) (C₃₋₆)cycloalkyl, (C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl, (C₀₋₆)alkyl, phenyl, (C₀₋₆)alkyl or hetero(C₅₋₆)aryl, (C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is substituted by $-X^9OR^{24}$, $-X^9C(O)R^{24}$, $-X^9C(O)OR^{24}$, $-X^9C(O)NR^{24}R^{25}$, $-X^9NR^{24}R^{25}$, $-X^9NR^{25}C(O)R^{24}$, $-X^9NR^{25}C(O)OR^{24}$, $-X^9NR^{25}C(O)NR^{24}R^{25}$ or $-X^9NR^{25}C(NR^{25})NR^{24}R^{25}$, wherein X^9 is a bond or (C₁₋₆)alkylene, R^{24} is (C₂₋₆)cycloalkyl, (C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl, (C₀₋₆)alkyl, phenyl, (C₀₋₆)alkyl or hetero(C₅₋₆)aryl, (C₀₋₆)alkyl and R^{25} is hydrogen or (C₁₋₆)alkyl, wherein within R^{11} any alicyclic or aromatic ring system present may be substituted further by 1 to 5 substituents independently selected from (C₁₋₆)alkyl, halo, halo-substituted (C₁₋₄)alkyl, OR¹², X³SR¹², C(O)OR¹² and $-X^2NR^{12}C(O)OR^{12}$, wherein X^2 is a bond or (C₁₋₆)alkylene and R^{14} is hydrogen or (C₁₋₆)alkyl; R^2 is hydrogen; R^3 is hydrogen or (C₁₋₄)alkyl or taken with R^4 together with the carbon atom to which both R^3 and R^4 are attached forms (C₃₋₅)cycloalkylene; and R^4 is hydrogen or as defined above; and the or an N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and or mixtures of isomers; and the or a pharmaceutically acceptable salts thereof.

3. (Currently Amended) The compound of Claim 2 in which:

R^1 is a group of Formula (a) wherein within Formula (a):

R^5 and R^7 both are hydrogen;

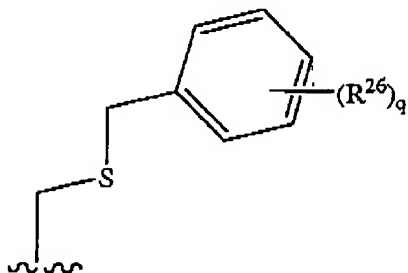
R^9 is (i) (C_{1-6}) alkyl optionally substituted with $-OR^{14}$ or $-SR^{14}$, wherein R^{14} is (C_{2-6}) cycloalkyl, (C_{0-6}) alkyl, phenyl, (C_{0-6}) alkyl, or biphenyl, (C_{0-6}) alkyl or hetero (C_{5-6}) aryl (C_{0-6}) alkyl; or

(ii) a group selected from (C_{3-6}) cycloalkyl, (C_{0-6}) alkyl, phenyl, (C_{0-6}) alkyl, or biphenyl, (C_{0-6}) alkyl or hetero (C_{5-10}) aryl (C_{0-6}) alkyl; wherein within R^9 any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C_{1-6}) alkyl, (C_{1-6}) alkylidene, cyano, halo, halo-substituted (C_{1-4}) alkyl, nitro, $-X^3NR^{12}R^{12}$, $-X^3NR^{12}C(O)OR^{12}$, $-X^3NR^{12}C(O)NR^{12}R^{12}$, $-X^3NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^3OR^{12}$, $-X^3SR^{12}$, $-X^3C(O)OR^{12}$, $-X^3C(O)NR^{12}R^{12}$, $-X^3S(O)_2NR^{12}R^{12}$, $-X^3P(O)(OR^3)OR^{12}$, $-X^3OP(O)(OR^3)OR^{12}$, $-X^3OC(O)R^{13}$, $-X^3OC(O)R^{13}$, $-X^3NR^{12}C(O)R^{13}$, $-X^3S(O)R^{13}$, $-X^3S(O)_2R^{13}$ and $-X^3C(O)R^{13}$, wherein X^3 is a bond or (C_{1-6}) alkylene, R^{12} at each occurrence independently is hydrogen, (C_{1-3}) alkyl or halo-substituted (C_{1-3}) alkyl and R^{13} is (C_{1-3}) alkyl or halo-substituted (C_{1-3}) alkyl; and

R^{11} is $-X^4X^5R^{18}$ or $-X^5X^6R^{18}$, wherein X^4 X^5 is $-C(O)-$, X^5 X^6 is a bond and R^{18} is morpholinyl (i) (C_{2-12}) cycloalkyl, (C_{0-6}) alkyl, hetero (C_{1-12}) cycloalkyl, (C_{0-6}) alkyl, (C_{6-12}) aryl, (C_{0-6}) alkyl or hetero (C_{5-12}) aryl, (C_{0-6}) alkyl or (ii) phenyl, (C_{0-6}) alkyl or hetero (C_{5-6}) aryl, (C_{0-6}) alkyl, wherein said phenyl or heteroaryl is substituted by $-X^9OR^{24}$, $-X^9C(O)R^{24}$, $-X^9C(O)OR^{24}$, $-X^9C(O)NR^{24}R^{25}$, $-X^9NR^{24}R^{25}$, $-X^9NR^{25}C(O)R^{24}$, $-X^9NR^{25}C(O)OR^{24}$, $-X^9NR^{25}C(O)NR^{24}R^{25}$ or $-X^9NR^{25}C(NR^{25})NR^{24}R^{25}$, wherein X^9 is a bond or (C_{1-6}) alkylene, R^{24} is phenyl, (C_{0-6}) alkyl or hetero (C_{5-6}) aryl, (C_{0-6}) alkyl and R^{25} is hydrogen or (C_{1-6}) alkyl, wherein within R^{11} said morpholinyl any aromatic ring system present may be substituted further by 1 to 5 substituents independently selected from (C_{1-6}) alkyl, halo, halo-substituted (C_{1-4}) alkyl, $-OR^{12}$, $-X^3SR^{12}$, $-C(O)OR^{12}$ and $-X^3NR^{12}C(O)OR^{12}$ wherein X^3 is a bond or (C_{1-6}) alkylene and R^{12} is hydrogen or (C_{1-6}) alkyl; and R^3 and R^4 are both hydrogen; and the or an N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and or mixtures of isomers; and the or a pharmaceutically acceptable salts thereof; and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers; and the pharmaceutically acceptable salts thereof.

4. (Canceled)

5. (Currently Amended) The compound of ~~Claim 4~~ Claim 3 in which within ~~Formula (a)~~, wherein R^9 is a group having the following formula:



in which q is 0 to 5 and R^{26} at each occurrence is independently selected from (C_{1-4}) alkyl, cyano, halo, halo-substituted (C_{1-4}) alkyl, nitro, $-OR^{12}$, $-SR^{12}$ and $-C(O)OR^{12}$, wherein R^{12} is hydrogen, (C_{1-3}) alkyl or halo-substituted (C_{1-3}) alkyl and R^{13} is (C_{1-6}) alkyl or halo-substituted (C_{1-3}) alkyl; and

R^{11} is morpholinylcarbonyl, wherein said morpholinylcarbonyl may be substituted further by 1 to 2 substituents independently selected from (C_{1-6}) alkyl, *tert*-butoxycarbonylamino, *tert*-butoxycarbonylaminomethyl, bromo, chloro, ethoxy, fluoro, hydroxy, methoxy and methylsulfanyl;

~~and the or an~~ N -oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and or mixtures of isomers; and the or a pharmaceutically acceptable salts thereof.

6. (Currently Amended) The compound of ~~Claim 3~~ in which within Formula (a), wherein R^9 is benzylsulfanylmethyl, 2-bromobenzylsulfanylmethyl, 2-chlorobenzylsulfanylmethyl, 2-(2-chlorophenylsulfanylmethyl), cyclohexyl, 4-ethylidenecyclohexyl, 2-iodobenzylsulfanylmethyl, 2-methylbenzylsulfanylmethyl, 3-methyl-3-trifluoromethoxycyclohexylmethyl, 4-methylcyclohexylmethyl or 2-nitrobenzylsulfanylmethyl and R^{11} is 4-*tert*-butoxycarbonylaminobenzoyl, 3-*tert*-butoxycarbonylaminomethylbenzoyl, 2-(3,5-dimethoxyphenyl)thiazol-4-ylcarbonyl, fur-3-ylcarbonyl, 4-methoxybenzoyl, 3-methylbenzoyl, 3-phenoxybenzoyl, 5-pyrid-2-ylthien-2-ylcarbonyl, 3-benzoylbenzoyl, 4-methylbenzoyl, thien-2-ylcarbonyl, morpholin-4-ylcarbonyl, 5-bromothiophen-2-ylcarbonyl, 5-chlorothiophen-2-ylcarbonyl, 5-methylthien-2-ylcarbonyl, 2-(2-chloro-6-methylphenyl)ureidobenzoyl, cyclohexyl-1-en-1-ylcarbonyl, 3-ethoxybenzoyl, 3-fluorobenzoyl, 4-fluorobenzoyl and piperidin-1-ylcarbonyl;

and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers; and the pharmaceutically acceptable salts thereof.

7. (Currently Amended) The compound of Claim 6 selected from a group consisting of:

N-(2-benzylsulfanyl-1*R*-cyanomethylcarbamoyl-ethyl)-4-hydroxybenzamide;
N-[2-(2-bromobenzylsulfanyl)-1*R*-cyanomethylcarbamoyl-ethyl]benzamide;
N-[1*R*-cyanomethylcarbamoyl-2-(2-iodobenzylsulfanyl)ethyl]benzamide;
N-[1*R*-cyanomethylcarbamoyl-2-(2-cyanobenzylsulfanyl)ethyl]morpholine-4-carboxamide;
N-[3-(2-chlorophenylsulfanyl)-1*R*-cyanomethylcarbamoylpropyl]benzamide;
N-[1*R*-cyanomethylcarbamoyl-2-(2-nitrobenzylsulfanyl)ethyl]morpholine-4-carboxamide;
N-[1*R*-cyanomethylcarbamoyl-2-(2-methylbenzylsulfanyl)ethyl]morpholine-4-carboxamide;
and
N-[1*R*-cyanomethylcarbamoyl-2-(2-methylbenzylsulfanyl)ethyl]benzamide; and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers; and or the pharmaceutically acceptable salts thereof.

8. (Currently Amended) A pharmaceutical composition comprising a compound of Claim 1, or a an *N*-oxide derivative, prodrug derivative, individual isomer, mixture of isomers, or a pharmaceutically acceptable salt thereof in admixture with one or more suitable excipients.

9. (Withdrawn) A method of treating a disease in an animal in which cysteine protease activity contributes to the pathology and/or symptomatology of the disease, which method comprises administering to the animal a therapeutically effective amount of compound of Claim 1; or a *N*-oxide derivative, prodrug derivative, individual isomer or mixture of isomers or a pharmaceutically acceptable salt thereof.

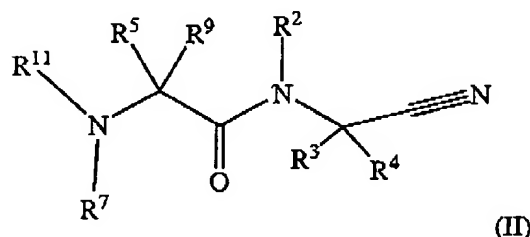
10. (Withdrawn) The method of Claim 9 in which the cysteine protease is cathepsin S.

11. (Withdrawn) The method of Claim 10 in which the disease is an autoimmune disorder, allergic disorder, allogeneic immune response, a disorder involving excessive elastolysis, cardiovascular disorders or a disorder involving fibril formation.

12. (Withdrawn) The method of Claim 11 in which the disorder is selected from juvenile onset diabetes, multiple sclerosis, pemphigus vulgaris, Graves' disease, myasthenia gravis, systemic lupus erythematosus, rheumatoid arthritis, Hashimoto's thyroiditis, asthma, organ transplant or tissue graft rejections, chronic obstructive pulmonary disease, bronchiolitis, excessive airway elastolysis in asthma and bronchitis, pneumonitis, plaque rupture, atheroma and systemic amyloidosis.

13. (Withdrawn) A compound according to claim 1 in which R^1 is a group of formula (a) wherein X^1 is $-\text{CH}_2\text{S}(\text{O})_2-$; and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers; and the pharmaceutically acceptable salts thereof.

14. (Currently Amended) A compound of Formula (II):



wherein:

R^2 is hydrogen or (C_{1-6}) alkyl or as defined below;

R^3 is hydrogen, (C_{1-6}) alkyl or as defined below;

R^4 is (i) hydrogen or (C_{1-6}) alkyl, wherein said alkyl optionally is substituted with cyano, halo, nitro, $-\text{NR}^{12}\text{R}^{12}$, $-\text{NR}^{12}\text{C}(\text{O})\text{OR}^{12}$, $-\text{NR}^{12}\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$, $-\text{NR}^{12}\text{C}(\text{NR}^{12})\text{NR}^{12}\text{R}^{12}$, $-\text{OR}^{12}$, $-\text{SR}^{12}$, $-\text{C}(\text{O})\text{OR}^{12}$, $-\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$, $-\text{S}(\text{O})_2\text{NR}^{12}\text{R}^{12}$, $-\text{P}(\text{O})(\text{OR}^{12})\text{OR}^{12}$, $-\text{OP}(\text{O})(\text{OR}^{12})\text{OR}^{12}$, $-\text{NR}^{12}\text{C}(\text{O})\text{R}^{13}$, $-\text{S}(\text{O})\text{R}^{13}$, $-\text{S}(\text{O})_2\text{R}^{13}$, $-\text{C}(\text{O})\text{R}^{13}$, $-\text{OR}^{14}$, $-\text{SR}^{14}$, $-\text{S}(\text{O})\text{R}^{14}$, $-\text{S}(\text{O})_2\text{R}^{14}$, $-\text{C}(\text{O})\text{R}^{14}$, $-\text{C}(\text{O})\text{OR}^{14}$, $-\text{OC}(\text{O})\text{R}^{14}$, $-\text{NR}^{14}\text{R}^{15}$, $-\text{NR}^{15}\text{C}(\text{O})\text{R}^{14}$, $-\text{NR}^{15}\text{C}(\text{O})\text{OR}^{14}$, $-\text{C}(\text{O})\text{NR}^{14}\text{R}^{15}$, $-\text{S}(\text{O})_2\text{NR}^{14}\text{R}^{15}$, $-\text{NR}^{15}\text{C}(\text{O})\text{NR}^{14}\text{R}^{15}$ or $-\text{NR}^{15}\text{C}(\text{NR}^{15})\text{NR}^{14}\text{R}^{15}$, wherein R^{12} at each occurrence independently is hydrogen, (C_{1-6}) alkyl or halo-substituted (C_{1-3}) alkyl, R^{13} is (C_{1-6}) alkyl or halo-substituted (C_{1-3}) alkyl, R^{14} is (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, (C_{6-12}) aryl (C_{0-6}) alkyl, hetero (C_{5-12}) aryl (C_{0-6}) alkyl, or (C_{3-12}) polycycloaryl (C_{0-6}) alkyl or hetero (C_{3-12}) polycycloaryl (C_{0-6}) alkyl, and R^{15} is hydrogen

or (C₁₋₆)alkyl, and wherein within R¹⁴ said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, or polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶, -X⁴C(O)OR¹⁶, -X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶, -X⁴C(O)NR¹⁶R¹⁷, -X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴ is a bond or (C₁₋₆)alkylene, R¹⁶ is hydrogen or (C₁₋₆)alkyl and R¹⁷ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, or (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl; or

(ii) a group selected from (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl and hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶, -X⁴C(O)OR¹⁶, -X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶, -X⁴C(O)NR¹⁶R¹⁷, -X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴, R¹⁶ and R¹⁷ are as defined above; wherein within R⁴ any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X⁴NR¹²R¹², -X⁴NR¹²C(O)OR¹², -X⁴NR¹²C(O)NR¹²R¹², -X⁴NR¹²C(NR¹²)NR¹²R¹², -X⁴OR¹², -X⁴SR¹², -X⁴C(O)OR¹², -X⁴C(O)NR¹²R¹², -X⁴S(O)₂NR¹²R¹², -X⁴P(O)(OR³)OR¹², -X⁴OP(O)(OR³)OR¹², -X⁴OC(O)R¹³, -X⁴NR¹³C(O)R¹³, -X⁴S(O)R¹³, -X⁴S(O)₂R¹³ and -X⁴C(O)R¹³; wherein X⁴, R¹² and R¹³ are as defined above, or

R⁴ and R² taken together form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, exo or methylene, or R⁴ and R² together with the carbon atom to which both R⁴ and R² are attached form (C₃₋₈)cycloalkylene or (C₃₋₈)heterocycloalkylene;

R⁵ is hydrogen or (C₁₋₆)alkyl;

R⁷ is hydrogen or (C₁₋₆)alkyl;

R⁹ is (C₆₋₁₂)aryl(C₁₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₁₋₆)alkyl, -X⁴OR¹⁴, -X⁴SR¹⁴, -X⁴S(O)R¹⁴, -X⁴S(O)₂R¹⁴ or -X⁴NR¹⁴R¹⁵, wherein X⁴, R¹⁴ and R¹⁵ are as defined above and wherein within R⁹ said aryl or heteroaryl ring optionally is substituted by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X⁴NR¹²R¹², -X⁴NR¹²C(O)OR¹², -X⁴NR¹²C(O)NR¹²R¹², -X⁴NR¹²C(NR¹²)NR¹²R¹²,

$-X^4OR^{12}$, $-X^4SR^{12}$, $-X^4C(O)R^{12}$, $-X^4C(O)OR^{12}$, $-X^4C(O)NR^{12}R^{12}$, $-X^4S(O)_2NR^{12}R^{12}$,
 $-X^4P(O)(OR^3)OR^{12}$, $-X^4OP(O)(OR^3)OR^{12}$, $-X^4OC(O)R^{13}$, $-X^4NR^{12}C(O)R^{13}$, $-X^4S(O)R^{13}$, and
 $-X^4S(O)_2R^{13}$, wherein X^4 , R^{12} and R^{13} are as defined above; and

R^{11} is $-X^5X^6R^{18}$, wherein X^5 is $-C(O)-$, $-C(O)C(O)-$ or $-S(O)_2-$, X^6 is a bond, $-O-$ or
 $-NR^{10}-$, wherein R^{10} is hydrogen or (C_{1-6}) alkyl, and R^{18} is morpholinyl (i) (C_{1-10}) alkyl
optionally substituted by cyano, halo, nitro, $NR^{12}R^{12}$, $NR^{12}C(O)OR^{12}$, $NR^{12}C(O)NR^{12}R^{12}$,
 $NR^{12}C(NR^{12})NR^{12}R^{12}$, OR^{12} , SR^{12} , $C(O)OR^{12}$, $C(O)NR^{12}R^{12}$, $S(O)_2NR^{12}R^{12}$,
 $P(O)(OR^{12})OR^{12}$, $OP(O)(OR^{12})OR^{12}$, $NR^{12}C(O)R^{12}$, $S(O)R^{12}$, $S(O)_2R^{12}$, $C(O)R^{12}$, OR^{20} ,
 SR^{20} , $S(O)R^{20}$, $S(O)_2R^{20}$, $C(O)R^{20}$, $C(O)OR^{20}$, $C(O)NR^{20}R^{21}$, $NR^{20}R^{21}$, $NR^{21}C(O)R^{20}$,
 $NR^{21}C(O)OR^{20}$, $NR^{21}C(O)NR^{20}R^{21}$ or $NR^{21}C(NR^{21})NR^{20}R^{21}$, wherein R^{12} and R^{13} are as
defined above, R^{20} is (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-12}) cycloalkyl (C_{0-6}) alkyl,
 (C_{6-12}) aryl (C_{0-6}) alkyl, hetero (C_{5-12}) aryl (C_{0-6}) alkyl, (C_{0-12}) bicycloaryl (C_{0-6}) alkyl or
hetero (C_{3-12}) bicycloaryl (C_{0-6}) alkyl and R^{21} at each occurrence independently is hydrogen or
 (C_{1-6}) alkyl or (ii) (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-12}) cycloalkyl (C_{0-6}) alkyl,
 (C_{6-12}) aryl (C_{0-6}) alkyl, hetero (C_{5-12}) aryl (C_{0-6}) alkyl, (C_{0-12}) bicycloaryl (C_{0-6}) alkyl or
hetero (C_{3-12}) bicycloaryl (C_{0-6}) alkyl or (iii) (C_{3-6}) cycloalkyl (C_{0-6}) alkyl,
hetero (C_{3-6}) cycloalkyl (C_{0-6}) alkyl, phenyl (C_{0-6}) alkyl or hetero (C_{5-6}) aryl (C_{0-6}) alkyl, wherein
said cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is substituted by $-X^4OR^{22}$, $-X^4SR^{22}$,
 $-X^4S(O)R^{22}$, $-X^4S(O)_2R^{22}$, $-X^4C(O)R^{22}$, $-X^4C(O)OR^{22}$, $-X^4C(O)NR^{22}R^{22}$, $-X^4NR^{22}R^{22}$,
 $-X^4NR^{22}C(O)R^{22}$, $-X^4NR^{22}C(O)OR^{22}$, $-X^4NR^{22}C(O)NR^{22}R^{22}$ or $-X^4NR^{22}C(NR^{22})NR^{22}R^{22}$,
wherein X^4 is as defined above, R^{22} is (C_{3-6}) cycloalkyl (C_{0-6}) alkyl,
hetero (C_{3-6}) cycloalkyl (C_{0-6}) alkyl, phenyl (C_{0-6}) alkyl or hetero (C_{5-6}) aryl (C_{0-6}) alkyl and R^{23} at
each occurrence independently is hydrogen or (C_{1-6}) alkyl; wherein within R^{11} said
morpholinyl any aliphatic or aromatic ring system present may be substituted further by 1 to
5 radicals independently selected from (C_{1-6}) alkyl, (C_{1-6}) alkylidene, cyano, halo,
halo-substituted (C_{1-4}) alkyl, nitro, $-X^4NR^{12}R^{12}$, $-X^4NR^{12}C(O)OR^{12}$, $-X^4NR^{12}C(O)NR^{12}R^{12}$,
 $-X^4NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^4OR^{12}$, $-X^4SR^{12}$, $-X^4C(O)OR^{12}$, $-X^4C(O)NR^{12}R^{12}$,
 $-X^4S(O)_2NR^{12}R^{12}$, $-X^4P(O)(OR^3)OR^{12}$, $-X^4OP(O)(OR^3)OR^{12}$, $-X^4OC(O)R^{13}$,
 $-X^4NR^{12}C(O)R^{13}$, $-X^4S(O)R^{13}$, $-X^4S(O)_2R^{13}$ and $-X^4C(O)R^{13}$, wherein X^4 , R^{12} and R^{13} are as
defined above; and the or an *N*-oxide derivatives, prodrug derivatives, protected derivatives,
individual isomers and or mixtures of isomers; and the or a pharmaceutically acceptable salts
thereof.

15. (Currently Amended) The compound of Claim 14 in which:

R^2 is hydrogen;
 R^3 is hydrogen; ~~or methyl or taken with R^4 together with the carbon atom to which both R^3 and R^4 are attached forms (C₃₋₆)cycloalkylene;~~
 R^4 is hydrogen; ~~or methyl or as defined above;~~
 R^5 is hydrogen or (C₁₋₆)alkyl;
 R^7 is hydrogen or methyl;
 R^9 represents (C₆₋₁₂)aryl(C₀₋₆)alkyl, ~~hetero(C₃₋₁₂)aryl(C₀₋₆)alkyl, -X⁴OR¹⁴, -X⁴SR¹⁴, -X⁴S(O)R¹⁴ or -X⁴NR¹⁴R¹⁵, wherein X⁴ is a bond or (C₁₋₆)alkylene, R¹⁴ is (C₆₋₁₂)aryl(C₀₋₆)alkyl, or hetero(C₃₋₁₂)aryl(C₀₋₆)alkyl and R¹⁵ is hydrogen or (C₁₋₆)alkyl, and wherein within R⁹ said aryl or heteroaryl ring optionally is substituted by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X⁴NR¹³R¹², -X⁴OR¹², -X⁴C(O)R¹², and -X⁴SR¹², wherein X⁴ is a bond or (C₁₋₆)alkylene, R¹² at each occurrence independently is hydrogen, (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, and R¹³ is (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl; and~~
 R^{11} is ~~-X⁴X⁵R¹⁸ -X⁵X⁶R¹⁸~~, wherein ~~wherein X⁴ X⁵ is -C(O)- or -S(O)-, X⁵ X⁶ is a bond, -O- or -NR¹⁹, wherein R¹⁹ is hydrogen or (C₁₋₆)alkyl, and R¹⁸ is morpholinyl, (i) (C₁₋₁₀)alkyl or (ii) (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl or hetero(C₃₋₁₂)aryl(C₀₋₆)alkyl or (iii) (C₃₋₆)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl(C₀₋₆)alkyl, phenyl(C₀₋₆)alkyl or hetero(C₃₋₆)aryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is substituted by -X⁹OR²⁴, -X⁹C(O)R²⁴, -X⁹C(O)OR²⁴, -X⁹C(O)NR²⁴R²⁵, -X⁹NR²⁴R²⁵, -X⁹NR²⁵C(O)R²⁴, -X⁹NR²⁵C(O)OR²⁴, -X⁹NR²⁵C(O)NR²⁴R²⁵ or -X⁹NR²⁵C(NR²⁵)NR²⁴R²⁵, wherein X⁹ is a bond or (C₁₋₆)alkylene, R²⁴ is (C₃₋₆)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl(C₀₋₆)alkyl, phenyl(C₀₋₆)alkyl or hetero(C₃₋₆)aryl(C₀₋₆)alkyl and R²⁵ is hydrogen or (C₁₋₆)alkyl, wherein within R¹¹ said morpholinyl any alicyclic or aromatic ring system present may be substituted further by 1 to 5 substituents independently selected from (C₁₋₆)alkyl, halo, halo-substituted (C₁₋₄)alkyl, -OR¹², -X³SR¹², -C(O)OR¹² and -X³NR¹²C(O)OR¹², wherein X³ is a bond or (C₁₋₆)alkylene and R¹⁴ is hydrogen or (C₁₋₆)alkyl; and the or an N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and or mixtures of isomers; and the or a pharmaceutically acceptable salts thereof.~~

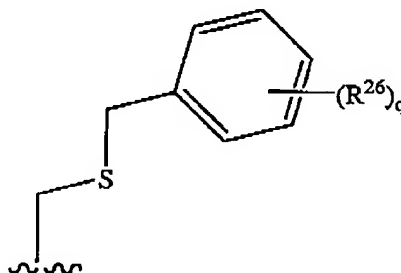
16. (Currently Amended) The compound of Claim 15 in which:

R^3 , R^4 , R^5 and R^7 each are hydrogen;

R^9 represents is benzyl, benzyloxymethyl, benzylsulfanylethyl, benzylsulfanylmethyl, benzylsulfanylmethyl, indolylmethyl, naphthylmethyl, phenethyl, phenoxyethyl, phenylamino, pyridylmethyl, ~~pyridylsulfanylethyl, or phenylsulfanylethyl, thiazolyl or thienyl~~, wherein within R^9 the aromatic ring may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, $-X^4NR^{12}R^{12}$, $-X^4OR^{12}$, $-X^4C(O)R^{12}$, and $-X^4SR^{12}$, wherein X^4 is a bond or (C₁₋₆)alkylene, R^{12} at each occurrence independently is hydrogen, (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, and R^{13} is (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl; and

R^{11} is ~~is $-X^4X^5R^{18}$~~ $-X^5X^6R^{18}$, wherein X^4 X^5 is $-C(O)-$, X^5 is a bond, and R^{18} is morpholinyl (i) (C₂₋₁₂)cycloalkyl(C₀₋₆)alkyl, ~~hetero(C₂₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl or hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl or (ii) phenyl(C₀₋₆)alkyl or hetero(C₅₋₆)aryl(C₀₋₆)alkyl~~, wherein said phenyl or heteroaryl is substituted by $-X^9OR^{24}$, $-X^9C(O)R^{24}$, $-X^9C(O)OR^{24}$, $-X^9C(O)NR^{24}R^{25}$, $-X^9NR^{24}R^{25}$, $-X^9NR^{25}C(O)R^{24}$, $-X^9NR^{25}C(O)OR^{24}$, $-X^9NR^{25}C(O)NR^{24}R^{25}$ or $-X^9NR^{25}C(NR^{25})NR^{24}R^{25}$, wherein X^9 is a bond or (C₁₋₆)alkylene, R^{24} is phenyl(C₀₋₆)alkyl or hetero(C₅₋₆)aryl(C₀₋₆)alkyl and R^{25} is hydrogen or (C₁₋₆)alkyl, wherein within R^{11} said morpholinyl ~~any aromatic ring system present~~ may be substituted further by 1 to 5 substituents independently selected from (C₁₋₆)alkyl, halo, halo-substituted (C₁₋₄)alkyl, $-OR^{12}$, $-X^3SR^{12}$, $-C(O)OR^{12}$ and $-X^3NR^{12}C(O)OR^{12}$ wherein X^3 is a bond or (C₁₋₆)alkylene and R^{12} is hydrogen or (C₁₋₆)alkyl; and ~~the or an~~ or an N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and or mixtures of isomers; and ~~the or a~~ or a pharmaceutically acceptable salts thereof.

17. (Currently Amended) The compound of Claim 16 in which R^9 is a group having the following formula:



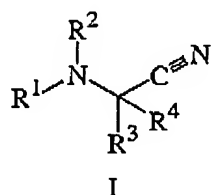
in which q is 0 to 5 and R^{26} at each occurrence is independently selected from (C₁₋₄)alkyl, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, $-OR^{12}$, and $-SR^{12}$ and $-C(O)OR^{12}$, wherein R^{12}

is hydrogen, (C₁₋₃)alkyl or halo-substituted (C₁₋₃)alkyl and R¹³ is (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl; and the or an N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and or mixtures of isomers; and the or a pharmaceutically acceptable salts thereof.

18. (Canceled)

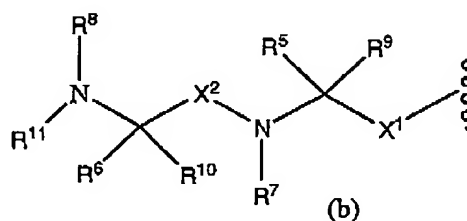
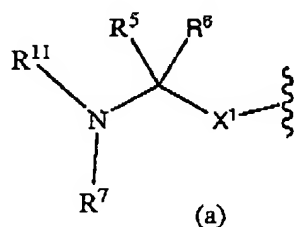
19. (Canceled)

20. (Withdrawn) A method of treating a disease in an animal in which cathepsin S activity contributes to the pathology and/or symptomatology of the disease, which method comprising administering to the animal a therapeutically effective amount of a compound of Formula (I):



in which:

R¹ is a group of Formula (a) or (b):



wherein:

X¹ and X² independently are -C(O)- or -CH₂S(O)₂-;

R⁵ and R⁶ are hydrogen or (C₁₋₆)alkyl;

R⁷ and R⁸ are hydrogen or (C₁₋₆)alkyl or as defined below;

R⁹ and R¹⁰ independently are (i) (C₁₋₆)alkyl optionally substituted with cyano, halo or nitro or (ii) a group selected from -X³NR¹²R¹², -X³NR¹²C(O)OR¹², -X³NR¹²C(O)NR¹²R¹², -X³NR¹²C(NR¹²)NR¹²R¹², -X³OR¹², -X³SR¹², -X³C(O)OR¹²,

-X³C(O)NR¹²R¹², -X³S(O)₂NR¹²R¹², -X³P(O)(OR¹²)OR¹², -X³OP(O)(OR¹²)OR¹²,
-X³NR¹²C(O)R¹³, -X³S(O)R¹³, -X³S(O)₂R¹³, -X³C(O)R¹³, -X³C(O)R¹⁴, -X³C(O)OR¹⁴,
-X³OC(O)R¹⁴, -X³NR¹⁵C(O)R¹⁴, -X³NR¹⁵C(O)OR¹⁴, -X³C(O)NR¹⁴R¹⁵,
-X³S(O)₂NR¹⁴R¹⁵, -X³NR¹⁵C(O)NR¹⁴R¹⁵, -X³NR¹⁵C(NR¹⁵)NR¹⁴R¹⁵, -X⁴SR¹⁴
-X⁴S(O)R¹⁴, -X⁴S(O)₂R¹⁴, -X⁴OR¹⁴, or -X⁴NR¹⁴R¹⁵, wherein X³ is (C₁₋₆)alkylene, X⁴
is a bond or (C₁₋₆)alkylene, R¹² at each occurrence independently is hydrogen,
(C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, R¹³ is (C₁₋₆)alkyl or halo-substituted
(C₁₋₃)alkyl, R¹⁴ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl,
(C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or
hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl and R¹⁵ is hydrogen or (C₁₋₆)alkyl, and wherein
within R¹⁴ said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or
heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶,
-X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶, -X⁴C(O)OR¹⁶,
-X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶, -X⁴C(O)NR¹⁶R¹⁷,
-X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴ is
a bond or (C₁₋₆)alkylene, R¹⁶ is hydrogen or (C₁₋₆)alkyl and R¹⁷ is
(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl,
hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or
hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, or (iii) a group selected from
(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl,
hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl and
hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl,
heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a
group selected from -R¹⁶, -X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶,
-X⁴C(O)OR¹⁶, -X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶,
-X⁴C(O)NR¹⁶R¹⁷, -X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or
-X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴, R¹⁶ and R¹⁷ are as defined above; wherein
within R⁹ and/or R¹⁰ any alicyclic or aromatic ring system present may be substituted
further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene,
cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X⁴NR¹²R¹², -X⁴NR¹²C(O)OR¹²,
-X⁴NR¹²C(O)NR¹²R¹², -X⁴NR¹²C(NR¹²)NR¹²R¹², -X⁴OR¹², -X⁴SR¹², -X⁴C(O)OR¹²,
-X⁴C(O)NR¹²R¹², -X⁴S(O)₂NR¹²R¹², -X⁴P(O)(OR⁴)OR¹², -X⁴OP(O)(OR¹²)OR¹²,
-X⁴OC(O)R¹³, -X⁴NR¹²C(O)R¹³, -X⁴S(O)R¹³, -X⁴S(O)₂R¹³ and -X⁴C(O)R¹³, wherein
X⁴, R¹² and R¹³ are as defined above, or

R^9 taken together with R^7 and/or R^{10} taken together with R^8 form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, oxo or methylene; and

R^{11} is $-X^5X^6R^{18}$, wherein X^5 is $-C(O)-$, $-C(O)C(O)-$ or $-S(O)_2-$, X^6 is a bond, $-O-$ or $-NR^{19}-$, wherein R^{19} is hydrogen or (C_{1-6}) alkyl, and R^{18} is (i) (C_{1-10}) alkyl optionally substituted by cyano, halo, nitro, $-NR^{12}R^{12}$, $-NR^{12}C(O)OR^{12}$, $-NR^{12}C(O)NR^{12}R^{12}$, $-NR^{12}C(NR^{12})NR^{12}R^{12}$, $-OR^{12}$, $-SR^{12}$, $-C(O)OR^{12}$, $-C(O)NR^{12}R^{12}$, $-S(O)_2NR^{12}R^{12}$, $-P(O)(OR^{12})OR^{12}$, $-OP(O)(OR^{12})OR^{12}$, $-NR^{12}C(O)R^{13}$, $-S(O)R^{13}$, $-S(O)_2R^{13}$, $-C(O)R^{13}$, $-OR^{20}$, $-SR^{20}$, $-S(O)R^{20}$, $-S(O)_2R^{20}$, $-C(O)R^{20}$, $-C(O)OR^{20}$, $-C(O)NR^{20}R^{21}$, $-NR^{20}R^{21}$, $-NR^{21}C(O)R^{20}$, $-NR^{21}C(O)OR^{20}$, $-NR^{21}C(O)NR^{20}R^{21}$ or $-NR^{21}C(NR^{21})NR^{20}R^{21}$, wherein R^{12} and R^{13} are as defined above, R^{20} is (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, (C_{6-12}) aryl (C_{0-6}) alkyl, hetero (C_{5-12}) aryl (C_{0-6}) alkyl, (C_{9-12}) bicycloaryl (C_{0-6}) alkyl or hetero (C_{8-12}) bicycloaryl (C_{0-6}) alkyl and R^{21} at each occurrence independently is hydrogen or (C_{1-6}) alkyl, or (ii) (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, (C_{6-12}) aryl (C_{0-6}) alkyl, hetero (C_{5-12}) aryl (C_{0-6}) alkyl, (C_{9-12}) bicycloaryl (C_{0-6}) alkyl or hetero (C_{8-12}) bicycloaryl (C_{0-6}) alkyl or (iii) (C_{3-6}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-6}) cycloalkyl (C_{0-6}) alkyl, phenyl (C_{0-6}) alkyl or hetero (C_{5-6}) aryl (C_{0-6}) alkyl, wherein said cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is substituted by $-X^4OR^{22}$, $-X^4SR^{22}$, $-X^4S(O)R^{22}$, $-X^4S(O)_2R^{22}$, $-X^4C(O)R^{22}$, $-X^4C(O)OR^{22}$, $-X^4C(O)NR^{22}R^{23}$, $-X^4NR^{22}R^{23}$, $-X^4NR^{23}C(O)R^{22}$, $-X^4NR^{23}C(O)OR^{22}$, $-X^4NR^{23}C(O)NR^{22}R^{23}$ or $-X^4NR^{23}C(NR^{23})NR^{22}R^{23}$, wherein X^4 is as defined above, R^{22} is (C_{3-6}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-6}) cycloalkyl (C_{0-6}) alkyl, phenyl (C_{0-6}) alkyl or hetero (C_{5-6}) aryl (C_{0-6}) alkyl and R^{23} at each occurrence independently is hydrogen or (C_{1-6}) alkyl; wherein within R^{11} any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C_{1-6}) alkyl, (C_{1-6}) alkylidene, cyano, halo, halo-substituted (C_{1-4}) alkyl, nitro, $-X^4NR^{12}R^{12}$, $-X^4NR^{12}C(O)OR^{12}$, $-X^4NR^{12}C(O)NR^{12}R^{12}$, $-X^4NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^4OR^{12}$, $-X^4SR^{12}$, $-X^4C(O)OR^{12}$, $-X^4C(O)NR^{12}R^{12}$, $-X^4S(O)_2NR^{12}R^{12}$, $-X^4P(O)(OR^3)OR^{12}$, $-X^4OP(O)(OR^3)OR^{12}$, $-X^4OC(O)R^{13}$, $-X^4NR^{12}C(O)R^{13}$, $-X^4S(O)R^{13}$, $-X^4S(O)_2R^{13}$ and $-X^4C(O)R^{13}$, wherein X^4 , R^{12} and R^{13} are as defined above;

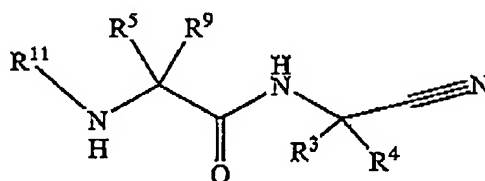
R^2 is hydrogen or (C_{1-6}) alkyl or as defined below;

R^3 is hydrogen, (C_{1-6}) alkyl or as defined below; and

R^4 is (i) hydrogen or (C_{1-6}) alkyl, wherein said alkyl is optionally substituted with cyano, halo, nitro, $-NR^{12}R^{12}$, $-NR^{12}C(O)OR^{12}$, $-NR^{12}C(O)NR^{12}R^{12}$, $-NR^{12}C(NR^{13})NR^{12}R^{12}$, $-OR^{12}$, $-SR^{12}$, $-C(O)OR^{13}$, $-C(O)NR^{12}R^{12}$, $-S(O)_2NR^{12}R^{12}$, $-P(O)(OR^{12})OR^{12}$, $-OP(O)(OR^{12})OR^{12}$, $-NR^{12}C(O)R^{13}$, $-S(O)R^{13}$, $-S(O)_2R^{13}$, $-C(O)R^{13}$, $-OR^{14}$, $-SR^{14}$, $-S(O)R^{14}$, $-S(O)_2R^{14}$, $-C(O)R^{14}$, $-C(O)OR^{14}$, $-OC(O)R^{14}$, $-NR^{14}R^{15}$, $-NR^{15}C(O)R^{14}$, $-NR^{15}C(O)OR^{14}$, $-C(O)NR^{14}R^{15}$, $-S(O)_2NR^{14}R^{15}$, $-NR^{15}C(O)NR^{14}R^{15}$ or $-NR^{15}C(NR^{15})NR^{14}R^{15}$, wherein R^{12} , R^{13} , R^{14} and R^{15} are as defined above, or (ii) a group selected from (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, hetero (C_{3-12}) cycloalkyl (C_{0-6}) alkyl, (C_{6-12}) aryl (C_{0-6}) alkyl, hetero (C_{5-12}) aryl (C_{0-6}) alkyl, (C_{9-12}) polycycloaryl (C_{0-6}) alkyl and hetero (C_{8-12}) polycycloaryl (C_{0-6}) alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from $-R^{16}$, $-X^4OR^{16}$, $-X^4SR^{16}$, $-X^4S(O)R^{16}$, $-X^4S(O)_2R^{16}$, $-X^4C(O)R^{16}$, $-X^4C(O)OR^{16}$, $-X^4OC(O)R^{16}$, $-X^4NR^{16}R^{17}$, $-X^4NR^{17}C(O)R^{16}$, $-X^4NR^{17}C(O)OR^{16}$, $-X^4C(O)NR^{16}R^{17}$, $-X^4S(O)_2NR^{16}R^{17}$, $-X^4NR^{17}C(O)NR^{16}R^{17}$ or $-X^4NR^{17}C(NR^{17})NR^{16}R^{17}$, wherein X^4 , R^{16} and R^{17} are as defined above; wherein within R^9 and/or R^{10} any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C_{1-6}) alkyl, (C_{1-6}) alkylidene, cyano, halo, halo-substituted (C_{1-4}) alkyl, nitro, $-X^4NR^{12}R^{12}$, $-X^4NR^{12}C(O)OR^{12}$, $-X^4NR^{12}C(O)NR^{12}R^{12}$, $-X^4NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^4OR^{12}$, $-X^4SR^{12}$, $-X^4C(O)OR^{12}$, $-X^4C(O)NR^{12}R^{12}$, $-X^4S(O)_2NR^{12}R^{12}$, $-X^4P(O)(OR^3)OR^{12}$, $-X^4OP(O)(OR^3)OR^{12}$, $-X^4OC(O)R^{13}$, $-X^4NR^{12}C(O)R^{13}$, $-X^4S(O)R^{13}$, $-X^4S(O)_2R^{13}$ and $-X^4C(O)R^{13}$, wherein X^4 , R^{12} and R^{13} are as defined above, or

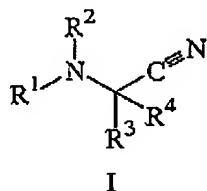
R^4 and R^2 taken together form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, oxo or methylene, or

R^4 and R^3 together with the carbon atom to which both R^4 and R^3 are attached form (C_{3-8}) cycloalkylene or (C_{3-8}) heterocycloalkylene; or an *N*-oxide derivative, prodrug derivative, individual isomer and mixtures of isomers; or a pharmaceutically acceptable salt thereof, but excluding compounds of the formula



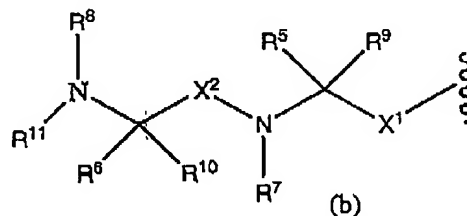
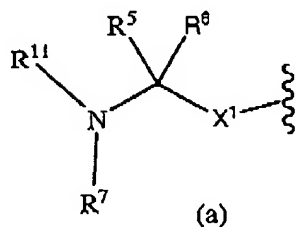
in which R^3 and R^4 are each hydrogen or (C_{1-6}) alkyl, or together with the carbon atom to which they are both attached form (C_{3-5}) cycloalkylene; R^5 is hydrogen or (C_{1-6}) alkyl; R^9 is (C_{6-12}) aryl (C_{1-6}) alkyl, hetero (C_{5-12}) aryl (C_{1-6}) alkyl, (C_{4-5}) alkyl or cyclohexylmethyl; and R^{11} is $C(O)R^{18}$ wherein R^{18} is hetero (C_{3-12}) cycloalkyl, (C_{6-12}) aryl (C_{0-6}) alkyl or hetero (C_{5-12}) aryl (C_{0-6}) alkyl.

21. (Withdrawn) The use of a compound of Formula (I):



in which:

R^1 is a group of Formula (a) or (b):



wherein:

X^1 and X^2 independently are $-C(O)-$ or $-CH_2S(O)_2-$;

R^5 and R^6 are hydrogen or (C_{1-6}) alkyl;

R^7 and R^8 are hydrogen or (C_{1-6}) alkyl or as defined below;

R^9 and R^{10} independently are (i) (C_{1-6}) alkyl optionally substituted with cyano, halo or nitro or (ii) a group selected from $-X^3NR^{12}R^{12}$, $-X^3NR^{12}C(O)OR^{12}$, $-X^3NR^{12}C(O)NR^{12}R^{12}$, $-X^3NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^3OR^{12}$, $-X^3SR^{12}$, $-X^3C(O)OR^{12}$, $-X^3C(O)NR^{12}R^{12}$, $-X^3S(O)_2NR^{12}R^{12}$, $-X^3P(O)(OR^{12})OR^{12}$, $-X^3OP(O)(OR^{12})OR^{12}$, $-X^3NR^{12}C(O)R^{13}$, $-X^3S(O)R^{13}$, $-X^3S(O)_2R^{13}$, $-X^3C(O)R^{13}$, $-X^3C(O)R^{14}$, $-X^3C(O)OR^{14}$, $-X^3OC(O)R^{14}$, $-X^3NR^{15}C(O)R^{14}$, $-X^3NR^{15}C(O)OR^{14}$, $-X^3C(O)NR^{14}R^{15}$, $-X^3S(O)_2NR^{14}R^{15}$, $-X^3NR^{15}C(O)NR^{14}R^{15}$, $-X^3NR^{15}C(NR^{15})NR^{14}R^{15}$, $-X^4SR^{14}$, $-X^4S(O)R^{14}$, $-X^4S(O)_2R^{14}$, $-X^4OR^{14}$, or $-X^4NR^{14}R^{15}$, wherein X^3 is (C_{1-6}) alkylene, X^4 is a bond or (C_{1-6}) alkylene, R^{12} at each occurrence independently is hydrogen,

(C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, R¹³ is (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, R¹⁴ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl and R¹⁵ is hydrogen or (C₁₋₆)alkyl, and wherein within R¹⁴ said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶, -X⁴C(O)OR¹⁶, -X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶, -X⁴C(O)NR¹⁶R¹⁷, -X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴ is a bond or (C₁₋₆)alkylene, R¹⁶ is hydrogen or (C₁₋₆)alkyl and R¹⁷ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, or (iii) a group selected from (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl and hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X⁴OR¹⁶, -X⁴SR¹⁶, -X⁴S(O)R¹⁶, -X⁴S(O)₂R¹⁶, -X⁴C(O)R¹⁶, -X⁴C(O)OR¹⁶, -X⁴OC(O)R¹⁶, -X⁴NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)R¹⁶, -X⁴NR¹⁷C(O)OR¹⁶, -X⁴C(O)NR¹⁶R¹⁷, -X⁴S(O)₂NR¹⁶R¹⁷, -X⁴NR¹⁷C(O)NR¹⁶R¹⁷ or -X⁴NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X⁴, R¹⁶ and R¹⁷ are as defined above; wherein within R⁹ and/or R¹⁰ any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X⁴NR¹²R¹², -X⁴NR¹²C(O)OR¹², -X⁴NR¹²C(O)NR¹²R¹², -X⁴NR¹²C(NR¹²)NR¹²R¹², -X⁴OR¹², -X⁴SR¹², -X⁴C(O)OR¹², -X⁴C(O)NR¹²R¹², -X⁴S(O)₂NR¹²R¹², -X⁴P(O)(OR⁴)OR¹², -X⁴OP(O)(OR¹²)OR¹², -X⁴OC(O)R¹³, -X⁴NR¹²C(O)R¹³, -X⁴S(O)R¹³, -X⁴S(O)₂R¹³ and -X⁴C(O)R¹³, wherein X⁴, R¹² and R¹³ are as defined above, or

R⁹ taken together with R⁷ and/or R¹⁰ taken together with R⁸ form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, oxo or methylene; and

R¹¹ is -X⁵X⁶R¹⁸, wherein X⁵ is -C(O)-, -C(O)C(O)- or -S(O)₂-, X⁶ is a bond, -O- or -NR¹⁹-, wherein R¹⁹ is hydrogen or (C₁₋₆)alkyl, and R¹⁸ is (i) (C₁₋₁₀)alkyl optionally substituted by cyano, halo, nitro, -NR¹²R¹², -NR¹²C(O)OR¹²,

$-\text{NR}^{12}\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$, $-\text{NR}^{12}\text{C}(\text{NR}^{12})\text{NR}^{12}\text{R}^{12}$, $-\text{OR}^{12}$, $-\text{SR}^{12}$, $-\text{C}(\text{O})\text{OR}^{12}$, $-\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$,
 $-\text{S}(\text{O})_2\text{NR}^{12}\text{R}^{12}$, $-\text{P}(\text{O})(\text{OR}^{12})\text{OR}^{12}$, $-\text{OP}(\text{O})(\text{OR}^{12})\text{OR}^{12}$, $-\text{NR}^{12}\text{C}(\text{O})\text{R}^{13}$, $-\text{S}(\text{O})\text{R}^{13}$,
 $-\text{S}(\text{O})_2\text{R}^{13}$, $-\text{C}(\text{O})\text{R}^{13}$, $-\text{OR}^{20}$, $-\text{SR}^{20}$, $-\text{S}(\text{O})\text{R}^{20}$, $-\text{S}(\text{O})_2\text{R}^{20}$, $-\text{C}(\text{O})\text{R}^{20}$, $-\text{C}(\text{O})\text{OR}^{20}$,
 $-\text{C}(\text{O})\text{NR}^{20}\text{R}^{21}$, $-\text{NR}^{20}\text{R}^{21}$, $-\text{NR}^{21}\text{C}(\text{O})\text{R}^{20}$, $-\text{NR}^{21}\text{C}(\text{O})\text{OR}^{20}$, $-\text{NR}^{21}\text{C}(\text{O})\text{NR}^{20}\text{R}^{21}$ or
 $-\text{NR}^{21}\text{C}(\text{NR}^{21})\text{NR}^{20}\text{R}^{21}$, wherein R^{12} and R^{13} are as defined above, R^{20} is

$(\text{C}_{3-12})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$, hetero $(\text{C}_{3-12})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$, $(\text{C}_{6-12})\text{aryl}(\text{C}_{0-6})\text{alkyl}$,
hetero $(\text{C}_{5-12})\text{aryl}(\text{C}_{0-6})\text{alkyl}$, $(\text{C}_{9-12})\text{bicycloaryl}(\text{C}_{0-6})\text{alkyl}$ or

hetero $(\text{C}_{8-12})\text{bicycloaryl}(\text{C}_{0-6})\text{alkyl}$ and R^{21} at each occurrence independently is
hydrogen or $(\text{C}_{1-6})\text{alkyl}$, or (ii) $(\text{C}_{3-12})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$,

hetero $(\text{C}_{3-12})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$, $(\text{C}_{6-12})\text{aryl}(\text{C}_{0-6})\text{alkyl}$, hetero $(\text{C}_{5-12})\text{aryl}(\text{C}_{0-6})\text{alkyl}$,
 $(\text{C}_{9-12})\text{bicycloaryl}(\text{C}_{0-6})\text{alkyl}$ or hetero $(\text{C}_{8-12})\text{bicycloaryl}(\text{C}_{0-6})\text{alkyl}$ or

(iii) $(\text{C}_{3-6})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$, hetero $(\text{C}_{3-6})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$, phenyl $(\text{C}_{0-6})\text{alkyl}$ or
hetero $(\text{C}_{5-6})\text{aryl}(\text{C}_{0-6})\text{alkyl}$, wherein said cycloalkyl, heterocycloalkyl, phenyl or

heteroaryl is substituted by $-\text{X}^4\text{OR}^{22}$, $-\text{X}^4\text{SR}^{22}$, $-\text{X}^4\text{S}(\text{O})\text{R}^{22}$, $-\text{X}^4\text{S}(\text{O})_2\text{R}^{22}$,

$-\text{X}^4\text{C}(\text{O})\text{R}^{22}$, $-\text{X}^4\text{C}(\text{O})\text{OR}^{22}$, $-\text{X}^4\text{C}(\text{O})\text{NR}^{22}\text{R}^{23}$, $-\text{X}^4\text{NR}^{22}\text{R}^{23}$, $-\text{X}^4\text{NR}^{23}\text{C}(\text{O})\text{R}^{22}$,

$-\text{X}^4\text{NR}^{23}\text{C}(\text{O})\text{OR}^{22}$, $-\text{X}^4\text{NR}^{23}\text{C}(\text{O})\text{NR}^{22}\text{R}^{23}$ or $-\text{X}^4\text{NR}^{23}\text{C}(\text{NR}^{23})\text{NR}^{22}\text{R}^{23}$, wherein X^4 is

as defined above, R^{22} is $(\text{C}_{3-6})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$, hetero $(\text{C}_{3-6})\text{cycloalkyl}(\text{C}_{0-6})\text{alkyl}$,
phenyl $(\text{C}_{0-6})\text{alkyl}$ or hetero $(\text{C}_{5-6})\text{aryl}(\text{C}_{0-6})\text{alkyl}$ and R^{23} at each occurrence

independently is hydrogen or $(\text{C}_{1-6})\text{alkyl}$; wherein within R^{11} any alicyclic or aromatic
ring system present may be substituted further by 1 to 5 radicals independently

selected from $(\text{C}_{1-6})\text{alkyl}$, $(\text{C}_{1-6})\text{alkylidene}$, cyano, halo, halo-substituted $(\text{C}_{1-4})\text{alkyl}$,

nitro, $-\text{X}^4\text{NR}^{12}\text{R}^{12}$, $-\text{X}^4\text{NR}^{12}\text{C}(\text{O})\text{OR}^{12}$, $-\text{X}^4\text{NR}^{12}\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$,

$-\text{X}^4\text{NR}^{12}\text{C}(\text{NR}^{12})\text{NR}^{12}\text{R}^{12}$, $-\text{X}^4\text{OR}^{12}$, $-\text{X}^4\text{SR}^{12}$, $-\text{X}^4\text{C}(\text{O})\text{OR}^{12}$, $-\text{X}^4\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$,

$-\text{X}^4\text{S}(\text{O})_2\text{NR}^{12}\text{R}^{12}$, $-\text{X}^4\text{P}(\text{O})(\text{OR}^3)\text{OR}^{12}$, $-\text{X}^4\text{OP}(\text{O})(\text{OR}^3)\text{OR}^{12}$, $-\text{X}^4\text{OC}(\text{O})\text{R}^{13}$,

$-\text{X}^4\text{NR}^{12}\text{C}(\text{O})\text{R}^{13}$, $-\text{X}^4\text{S}(\text{O})\text{R}^{13}$, $-\text{X}^4\text{S}(\text{O})_2\text{R}^{13}$ and $-\text{X}^4\text{C}(\text{O})\text{R}^{13}$, wherein X^4 , R^{12} and R^{13}

are as defined above;

R^2 is hydrogen or $(\text{C}_{1-6})\text{alkyl}$ or as defined below;

R^3 is hydrogen, $(\text{C}_{1-6})\text{alkyl}$ or as defined below; and

R^4 is (i) hydrogen or $(\text{C}_{1-6})\text{alkyl}$, wherein said alkyl is optionally substituted with

cyano, halo, nitro, $-\text{NR}^{12}\text{R}^{12}$, $-\text{NR}^{12}\text{C}(\text{O})\text{OR}^{12}$, $-\text{NR}^{12}\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$, $-\text{NR}^{12}\text{C}(\text{NR}^{12})\text{NR}^{12}\text{R}^{12}$,

$-\text{OR}^{12}$, $-\text{SR}^{12}$, $-\text{C}(\text{O})\text{OR}^{12}$, $-\text{C}(\text{O})\text{NR}^{12}\text{R}^{12}$, $-\text{S}(\text{O})_2\text{NR}^{12}\text{R}^{12}$, $-\text{P}(\text{O})(\text{OR}^{12})\text{OR}^{12}$,

$-\text{OP}(\text{O})(\text{OR}^{12})\text{OR}^{12}$, $-\text{NR}^{12}\text{C}(\text{O})\text{R}^{13}$, $-\text{S}(\text{O})\text{R}^{13}$, $-\text{S}(\text{O})_2\text{R}^{13}$, $-\text{C}(\text{O})\text{R}^{13}$, $-\text{OR}^{14}$, $-\text{SR}^{14}$, $-\text{S}(\text{O})\text{R}^{14}$,

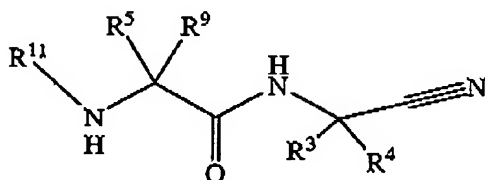
$-\text{S}(\text{O})_2\text{R}^{14}$, $-\text{C}(\text{O})\text{R}^{14}$, $-\text{C}(\text{O})\text{OR}^{14}$, $-\text{OC}(\text{O})\text{R}^{14}$, $-\text{NR}^{14}\text{R}^{15}$, $-\text{NR}^{15}\text{C}(\text{O})\text{R}^{14}$, $-\text{NR}^{15}\text{C}(\text{O})\text{OR}^{14}$,

$-\text{C}(\text{O})\text{NR}^{14}\text{R}^{15}$, $-\text{S}(\text{O})_2\text{NR}^{14}\text{R}^{15}$, $-\text{NR}^{15}\text{C}(\text{O})\text{NR}^{14}\text{R}^{15}$ or $-\text{NR}^{15}\text{C}(\text{NR}^{15})\text{NR}^{14}\text{R}^{15}$, wherein R^{12} ,

R^{13} , R^{14} and R^{15} are as defined above, or (ii) a group selected from (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl and hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from $-R^{16}$, $-X^4OR^{16}$, $-X^4SR^{16}$, $-X^4S(O)R^{16}$, $-X^4S(O)_2R^{16}$, $-X^4C(O)R^{16}$, $-X^4C(O)OR^{16}$, $-X^4OC(O)R^{16}$, $-X^4NR^{16}R^{17}$, $-X^4NR^{17}C(O)R^{16}$, $-X^4NR^{17}C(O)OR^{16}$, $-X^4C(O)NR^{16}R^{17}$, $-X^4S(O)_2NR^{16}R^{17}$, $-X^4NR^{17}C(O)NR^{16}R^{17}$ or $-X^4NR^{17}C(NR^{17})NR^{16}R^{17}$, wherein X^4 , R^{16} and R^{17} are as defined above; wherein within R^9 and/or R^{10} any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, $-X^4NR^{12}R^{12}$, $-X^4NR^{12}C(O)OR^{12}$, $-X^4NR^{12}C(O)NR^{12}R^{12}$, $-X^4NR^{12}C(NR^{12})NR^{12}R^{12}$, $-X^4OR^{12}$, $-X^4SR^{12}$, $-X^4C(O)OR^{12}$, $-X^4C(O)NR^{12}R^{12}$, $-X^4S(O)_2NR^{12}R^{12}$, $-X^4P(O)(OR^3)OR^{12}$, $-X^4OP(O)(OR^3)OR^{12}$, $-X^4OC(O)R^{13}$, $-X^4NR^{12}C(O)R^{13}$, $-X^4S(O)R^{13}$, $-X^4S(O)_2R^{13}$ and $-X^4C(O)R^{13}$, wherein X^4 , R^{12} and R^{13} are as defined above, or

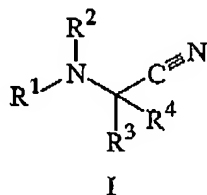
R^4 and R^2 taken together form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, oxo or methylene, or

R^4 and R^3 together with the carbon atom to which both R^4 and R^3 are attached form (C₃₋₈)cycloalkylene or (C₃₋₈)heterocycloalkylene; or an *N*-oxide derivative, prodrug derivative, individual isomer and mixtures of isomers; or a pharmaceutically acceptable salt thereof, but excluding compounds of the formula



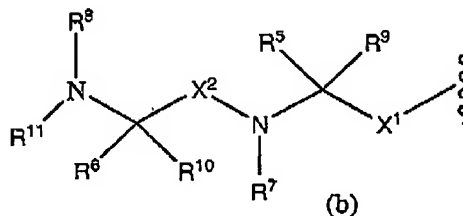
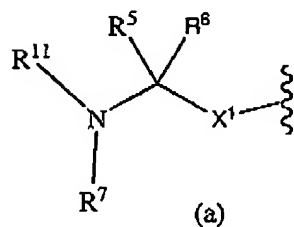
in which R^3 and R^4 are each hydrogen or (C₁₋₆)alkyl, or together with the carbon atom to which they are both attached form (C₃₋₅)cycloalkylene; R^5 is hydrogen or (C₁₋₆)alkyl; R^9 is (C₆₋₁₂)aryl(C₁₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₁₋₆)alkyl, (C₄₋₅)alkyl or cyclohexylmethyl; and R^{11} is C(O) R^{18} wherein R^{18} is hetero(C₃₋₁₂)cycloalkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl or hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, in the manufacture of a medicament for treating a disease in an animal in which cathepsin S activity contributes to the pathology and/or symptomatology of the disease.

22. (Withdrawn) A process for preparing a compound of Formula I:



in which:

R¹ is a group of Formula (a) or (b):



wherein:

X¹ and X² independently are -C(O)- or -CH₂S(O)₂-;

R⁵ and R⁶ are hydrogen or (C₁₋₆)alkyl;

R⁷ and R⁸ are hydrogen or (C₁₋₆)alkyl or as defined below;

R⁹ and R¹⁰ independently are (i) (C₁₋₆)alkyl optionally substituted with cyano, halo, nitro, -NR¹²R¹², -NR¹²C(O)OR¹², -NR¹²C(O)NR¹²R¹², -NR¹²C(NR¹²)NR¹²R¹², -OR¹², -SR¹², -C(O)OR¹², -C(O)NR¹²R¹², -S(O)₂NR¹²R¹², -P(O)(OR¹²)OR¹², -OP(O)(OR¹²)OR¹², -NR¹²C(O)R¹³, -S(O)R¹³, -S(O)₂R¹³, -C(O)R¹³, -OR¹⁴, -SR¹⁴, -S(O)R¹⁴, -S(O)₂R¹⁴, -C(O)R¹⁴, -C(O)OR¹⁴, -OC(O)R¹⁴, -NR¹⁴R¹⁵, -NR¹⁵C(O)R¹⁴, -NR¹⁵C(O)OR¹⁴, -C(O)NR¹⁴R¹⁵, -S(O)₂NR¹⁴R¹⁵, -NR¹⁵C(O)NR¹⁴R¹⁵ or -NR¹⁵C(NR¹⁵)NR¹⁴R¹⁵, wherein R¹² at each occurrence independently is hydrogen, (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, R¹³ is (C₁₋₆)alkyl or halo-substituted (C₁₋₃)alkyl, R¹⁴ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₃₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or hetero(C₃₋₁₂)polycycloaryl(C₀₋₆)alkyl and R¹⁵ is hydrogen or (C₁₋₆)alkyl, and wherein within R¹⁴ said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X³OR¹⁶, -X³SR¹⁶, -X³S(O)R¹⁶, -X³S(O)₂R¹⁶, -X³C(O)R¹⁶, -X³C(O)OR¹⁶, -X³OC(O)R¹⁶, -X³NR¹⁶R¹⁷, -X³NR¹⁷C(O)R¹⁶, -X³NR¹⁷C(O)OR¹⁶, -X³C(O)NR¹⁶R¹⁷, -X³S(O)₂NR¹⁶R¹⁷, -X³NR¹⁷C(O)NR¹⁶R¹⁷ or -X³NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X³ is

a bond or (C₁₋₆)alkylene, R¹⁶ is hydrogen or (C₁₋₆)alkyl and R¹⁷ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl or hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, or (ii) a group selected from (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl and hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X³OR¹⁶, -X³SR¹⁶, -X³S(O)R¹⁶, -X³S(O)₂R¹⁶, -X³C(O)R¹⁶, -X³C(O)OR¹⁶, -X³OC(O)R¹⁶, -X³NR¹⁶R¹⁷, -X³NR¹⁷C(O)R¹⁶, -X³NR¹⁷C(O)OR¹⁶, -X³C(O)NR¹⁶R¹⁷, -X³S(O)₂NR¹⁶R¹⁷, -X³NR¹⁷C(O)NR¹⁶R¹⁷ or -X³NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X³, R¹⁶ and R¹⁷ are as defined above; wherein within R⁹ and/or R¹⁰ any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X³NR¹²R¹², -X³NR¹²C(O)OR¹², -X³NR¹²C(O)NR¹²R¹², -X³NR¹²C(NR¹²)NR¹²R¹², -X³OR¹², -X³SR¹², -X³C(O)OR¹², -X³C(O)NR¹²R¹², -X³S(O)₂NR¹²R¹², -X³P(O)(OR³)OR¹², -X³OP(O)(OR³)OR¹², -X³OC(O)R¹³, -X³NR¹²C(O)R¹³, -X³S(O)R¹³, -X³S(O)₂R¹³ and -X³C(O)R¹³, wherein X³, R¹² and R¹³ are as defined above, or

R⁹ taken together with R⁷ and/or R¹⁰ taken together with R⁸ form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, oxo or methylene; and

R¹¹ is -X⁴X⁵R¹⁸, wherein X⁴ is -C(O)-, -C(O)C(O)- or -S(O)₂-, X⁵ is a bond, -O- or -NR¹⁹-, wherein R¹⁹ is hydrogen or (C₁₋₆)alkyl, and R¹⁸ is (i) (C₁₋₁₀)alkyl optionally substituted by cyano, halo, nitro, -NR¹²R¹², -NR¹²C(O)OR¹², -NR¹²C(O)NR¹²R¹², -NR¹²C(NR¹²)NR¹²R¹², -OR¹², -SR¹², -C(O)OR¹², -C(O)NR¹²R¹², -S(O)₂NR¹²R¹², -P(O)(OR¹²)OR¹², -OP(O)(OR¹²)OR¹², -NR¹²C(O)R¹³, -S(O)R¹³, -S(O)₂R¹³, -C(O)R¹³, -OR²⁰, -SR²⁰, -S(O)R²⁰, -S(O)₂R²⁰, -C(O)R²⁰, -C(O)OR²⁰, -C(O)NR²⁰R²¹, -NR²⁰R²¹, -NR²¹C(O)R²⁰, -NR²¹C(O)OR²⁰, -NR²¹C(O)NR²⁰R²¹ or -NR²¹C(NR²¹)NR²⁰R²¹, wherein R¹² and R¹³ are as defined above, R²⁰ is (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)bicycloaryl(C₀₋₆)alkyl or hetero(C₈₋₁₂)bicycloaryl(C₀₋₆)alkyl and R²¹ at each occurrence independently is hydrogen or (C₁₋₆)alkyl, or (ii) (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl,

hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)bicycloaryl(C₀₋₆)alkyl or hetero(C₈₋₁₂)bicycloaryl(C₀₋₆)alkyl or (iii) (C₃₋₆)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl(C₀₋₆)alkyl, phenyl(C₀₋₆)alkyl or hetero(C₅₋₆)aryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is substituted by -X³OR²², -X³SR²², -X³S(O)R²², -X³S(O)₂R²², -X³C(O)R²², -X³C(O)OR²², -X³C(O)NR²²R²³, -X³NR²²R²³, -X³NR²³C(O)R²², -X³NR²³C(O)OR²², -X³NR²³C(O)NR²²R²³ or -X³NR²³C(NR²³)NR²²R²³, wherein X³ is as defined above, R²² is (C₃₋₆)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₆)cycloalkyl(C₀₋₆)alkyl, phenyl(C₀₋₆)alkyl or hetero(C₅₋₆)aryl(C₀₋₆)alkyl and R²³ at each occurrence independently is hydrogen or (C₁₋₆)alkyl; wherein within R¹¹ any alicyclic or aromatic ring system present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X³NR¹²R¹², -X³NR¹²C(O)OR¹², -X³NR¹²C(O)NR¹²R¹², -X³NR¹²C(NR¹²)NR¹²R¹², -X³OR¹², -X³SR¹², -X³C(O)OR¹², -X³C(O)NR¹²R¹², -X³S(O)₂NR¹²R¹², -X³P(O)(OR³)OR¹², -X³OP(O)(OR³)OR¹², -X³OC(O)R¹³, -X³NR¹²C(O)R¹³, -X³S(O)R¹³, -X³S(O)₂R¹³ and -X³C(O)R¹³, wherein X³, R¹² and R¹³ are as defined above;

R² is hydrogen or (C₁₋₆)alkyl or as defined below;

R³ is hydrogen, (C₁₋₆)alkyl or as defined below; and

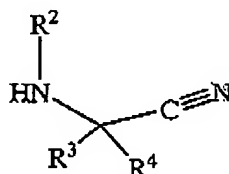
R⁴ is (i) hydrogen or (C₁₋₆)alkyl, wherein said alkyl is optionally substituted with cyano, halo, nitro, -NR¹²R¹², -NR¹²C(O)OR¹², -NR¹²C(O)NR¹²R¹², -NR¹²C(NR¹²)NR¹²R¹², -OR¹², -SR¹², -C(O)OR¹², -C(O)NR¹²R¹², -S(O)₂NR¹²R¹², -P(O)(OR¹²)OR¹², -OP(O)(OR¹²)OR¹², -NR¹²C(O)R¹³, -S(O)R¹³, -S(O)₂R¹³, -C(O)R¹³, -OR¹⁴, -SR¹⁴, -S(O)R¹⁴, -S(O)₂R¹⁴, -C(O)R¹⁴, -C(O)OR¹⁴, -OC(O)R¹⁴, -NR¹⁴R¹⁵, -NR¹⁵C(O)R¹⁴, -NR¹⁵C(O)OR¹⁴, -C(O)NR¹⁴R¹⁵, -S(O)₂NR¹⁴R¹⁵, -NR¹⁵C(O)NR¹⁴R¹⁵ or -NR¹⁵C(NR¹⁵)NR¹⁴R¹⁵, wherein R¹², R¹³, R¹⁴ and R¹⁵ are as defined above, or (ii) a group selected from (C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, hetero(C₃₋₁₂)cycloalkyl(C₀₋₆)alkyl, (C₆₋₁₂)aryl(C₀₋₆)alkyl, hetero(C₅₋₁₂)aryl(C₀₋₆)alkyl, (C₉₋₁₂)polycycloaryl(C₀₋₆)alkyl and hetero(C₈₋₁₂)polycycloaryl(C₀₋₆)alkyl, wherein said cycloalkyl, heterocycloalkyl, aryl, heteroaryl, polycycloaryl or heteropolycycloaryl ring optionally is substituted by a group selected from -R¹⁶, -X³OR¹⁶, -X³SR¹⁶, -X³S(O)R¹⁶, -X³S(O)₂R¹⁶, -X³C(O)R¹⁶, -X³C(O)OR¹⁶, -X³OC(O)R¹⁶, -X³NR¹⁶R¹⁷, -X³NR¹⁷C(O)R¹⁶, -X³NR¹⁷C(O)OR¹⁶, -X³C(O)NR¹⁶R¹⁷, -X³S(O)₂NR¹⁶R¹⁷, -X³NR¹⁷C(O)NR¹⁶R¹⁷ or -X³NR¹⁷C(NR¹⁷)NR¹⁶R¹⁷, wherein X³, R¹⁶ and R¹⁷ are as defined above; wherein within R⁹ and/or R¹⁰ any alicyclic or aromatic ring system

present may be substituted further by 1 to 5 radicals independently selected from (C₁₋₆)alkyl, (C₁₋₆)alkylidene, cyano, halo, halo-substituted (C₁₋₄)alkyl, nitro, -X³NR¹²R¹², -X³NR¹²C(O)OR¹², -X³NR¹²C(O)NR¹²R¹², -X³NR¹²C(NR¹³)NR¹²R¹², -X³OR¹², -X³SR¹², -X³C(O)OR¹², -X³C(O)NR¹²R¹², -X³S(O)₂NR¹²R¹², -X³P(O)(OR³)OR¹², -X³OP(O)(OR³)OR¹², -X³OC(O)R¹³, -X³NR¹²C(O)R¹³, -X³S(O)R¹³, -X³S(O)₂R¹³ and -X³C(O)R¹³, wherein X³, R¹² and R¹³ are as defined above, or

R⁴ and R² taken together form trimethylene, tetramethylene or phenylene-1,2-dimethylene, optionally substituted with hydroxy, oxo or methylene, or

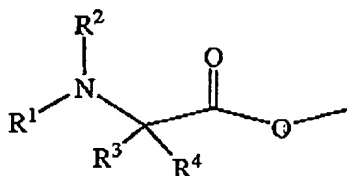
R⁴ and R³ together with the carbon atom to which both R⁴ and R³ are attached form (C₃₋₈)cycloalkylene or (C₃₋₈)heterocycloalkylene; and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers; and the pharmaceutically acceptable salts thereof; which process comprises:

(A) reacting a compound of Formula 2:



or a protected derivative thereof, with a compound of the formula R¹OY, or a protected derivative thereof, in which Y is hydrogen or 2,5-dioxopyrrolidin-1-yl and each R¹, R², R³ and R⁴ are as defined above; or

(B) reacting a compound of Formula 3:



or a protected derivative thereof, with ammonia to provide a corresponding amide and then reacting the amide with trifluoroacetic anhydride, in which each R¹, R², R³ and R⁴ are as defined above;

(C) optionally deprotecting a protected derivative of a compound of Formula I to provide a corresponding unprotected derivative;

- (D) optionally converting a compound of Formula I into a pharmaceutically acceptable salt;
- (E) optionally converting a salt form of a compound of Formula I to non-salt form;
- (F) optionally converting an unoxidized form of a compound of Formula I into a pharmaceutically acceptable *N*-oxide;
- (G) optionally converting an *N*-oxide form of a compound of Formula I to its unoxidized form;
- (H) optionally converting a non-derivatized compound of Formula I into a pharmaceutically prodrug derivative; and
- (I) optionally converting a prodrug derivative of a compound of Formula I to its non-derivatized form.